One Year Progress Report

June 2011-June 2012

Ministère des Télécoms
وزارة الاتصالات

TABLE OF CONTENTS

01. FIXED-LINE NETWORK, INTERNET AND VOICE

02. MOBILE NETWORK, INTERNET AND VOICE

03. PUBLIC FINANCES, INVESTMENTS AND INCOME

04. BOOSTING THE PRIVATE SECTOR

05. THE ADMINISTRATIVE MALFUNCTION

06. ONGOING PROJECTS

07. MAJOR FUTURE PROJECTS

08. VISION FOR THE SECTOR

Fellow Citizens,

The duty of civil servants, including Ministers, is to ensure the smooth running of the public utility entrusted to them. This duty becomes all the more crucial when the utility at stake is a major driver for the economy as is the case with the telecommunications sector. If we add to this reality the necessity to reform and rehabilitate the State apparatus in all its forms, we get an approximate idea of the sheer size of the challenge ahead.

It is worth recalling, at the outset, that the major ill that is eating away at our country is the soaring emigration rate. More than one million persons left Lebanon between 1993 and 2003 according to the General Security statistics. This figure comes on top of the official and disguised unemployment that affect a large portion of the resident population and represent altogether a rate of 45%.

The economic model that has been prevailing since the nineties hinders productive investments and promotes annuitant deposits, which generate few or no jobs.

The telecommunications sector is interesting in that it offers the country a unique opportunity to overturn this model in the blink of an eye. Unlike the heavy industry or agriculture, the conditions needed in order to turn Lebanon into a regional digital pole are easy to meet and do not require a major restructuring of the local economy. Skilled human resources abound. The local data transport network and the international connectivity have achieved a 10-year quantum leap and are expected to reach a satisfactory level in a few months. Lastly, the rules ensuring free competition and preventing the formation of monopolies are underway, and the Ministry will propose a new legal and regulatory framework in this regard to the Council of Ministers by the end of the summer.

Despite all the hurdles and the daily administrative sabotage, the measures taken by Ministers Bassil, Nahas and myself have upset the practices of former governments, which turned the sector into a cash cow, sometimes of private monopolies, and sometimes of the State Treasury.

Therefore, between 2009 and 2012, under our leadership, the Ministry of Telecommunications engaged in massive investments, in order to modernize the fixed-line and mobile networks - Fiber Optic and 3G - and implemented several measures aimed at boosting the sector and transforming Lebanon into a regional Digital Hub.

These initiatives have started to bear measurable results. Speed has improved by 15 and 18 times on the fixed-line and mobile networks respectively. International connectivity has increased by 11 times and will soon be redundant with the purchase of an 800 Gbps capacity on the Alexandros submarine cable. Internet prices for companies and private individuals have decreased by 80%. The number of DSL and Mobile Broadband subscribers has risen by 20% and 158%, respectively. All these measures are expected, according to World Bank studies, to increase the growth rate of the economy by more than 2 points.

Alone, there is room for improvement in the quality of mobile phone calls, given the obsolescence of the 2G infrastructure and the lack of maintenance and investment. An aggressive action plan was launched early 2012, which would enable the country to meet international standards by the end of the year at the latest.

All these achievements would not have taken place without the relentless and commendable work of an outstanding team which includes, in addition to the Ministry employees and directors, Ogero, the OSB, the post, and MIC1 and MIC2, my personal team composed of twenty exceptional persons who worked selflessly and with perseverance in order to reach our goal: placing Lebanon at the heart of the world digital economy.

The challenge is now for the Lebanese youth, programmers, inventors of applications and innovating entrepreneurs, once the infrastructure is upgraded, to turn the potential into reality and thus reverse the trend of emigration.

***The future is at our doorstep. Let us not miss our chance**...*

Nicolas Sehnaoui

01. FIXED-LINE NETWORK, INTERNET AND VOICE

On August 23, 2011, the Council of Ministers approved a decree aimed at reducing the prices of the Internet and of the international leased lines used by companies by an average of 80%. Educational institutions would benefit from an additional 20% reduction. In force since early October, this decree is the result of an increase in the international capacity, following the activation of the IMEWE cable in July 2011, from 3 to 23 and then to 33 Gigabytes per second, of which only 13 are used.

Since May 2012, the Ministry's Internet subscribers have access to unlimited downloads at night

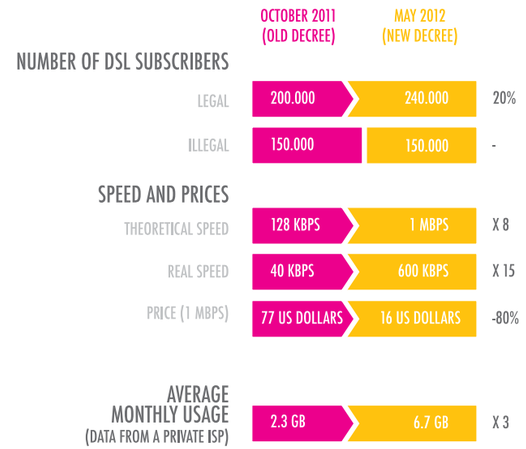
Internet: Investments and Price Reduction

Companies

The price of International E1 - equivalent to 2 Mbps - decreased from 2,700 US Dollars to 420 US Dollars. The local E1 is 33% less expensive for companies located at more than 20 km from Beirut in an attempt to promote a balanced development. Prices of the international leased lines decreased by 82%, from 15,000 US Dollars to 2,700 US Dollars.

Private Individuals

Prices of DSL packages decreased by an average of 80%, with a 2 to 5 times increase in capacity. The night usage, from midnight to 7:00 a.m., is free of charge and unlimited since May 5, 2012.



Voice: Increase in the Number of Users and Decrease in Prices

The number of fixed line subscribers connected to the copper network continued to increase and reached 854,000 by the end of April 2012. During the mandate of Minister Bassil, the fixed line purchase price decreased by 73% and a fee including a 40% discount for calls made between 9:00 p.m. and 7:00 a.m. was put in place.

Free Internet in Public Gardens

Launched by Minister Nahas and carried on by Minister Sehnaoui, this initiative aims at providing all public gardens in the country with a free Wifi service. So far, 3 public gardens have been provided with the service: Sioufi and Sanayeh in Beirut, and Menchiyeh in Tripoli.

3 public gardens have been provided with Wifi, and a further 5 are underway

In all, 12 gardens are included in the memorandum of understanding signed in 2011 between the Ministry of Telecommunications, the Association of Banks and the Internet Service Provider, Sodetel.

The Ministry will lay down the infrastructure, while Sodetel will supply the service and the Association of Banks will bear the costs arising in some gardens. An agreement was also concluded with the equipment manufacturer, Cisco, in order to obtain an 85% reduction on the price of the equipment. With a view to extending the project to other gardens, the Ministry of Telecommunications is currently conducting negotiations with several sponsors, who are ready to provide the necessary funding and services.

The Gardens Included in the Initiative

Wifi installed
- *Sanayeh- René Mouawad in Beirut (22,000 m²)*
- *Sioufi in Beirut (20,000 m²)*
- *Manchiyeh in Tripoli (10,000 m²)*

Wifi under installation
- *Jezzine (3,200 m²)*
- *Kadri in Zahle (4,500 m²)*
- *The Jesuites garden - Yassou3iyé in Beirut (4,400 m²)*
- *Saint Nicolas garden in Beirut (2,200 m²)*
- *Talet el Khayat - Moufti Hassan Khaled (5,000 m²)*

Wifi expected, pending funding
- *Zouk Mikhaël (2,950 m²)*
- *Ballouneh (6,550 m²)*
- *Burj Hammoud (1,623 m²)*
- *The Istiraha of Saïda (20,000 m²)*

Gardens on the waiting list
- *Baaklin (10,000 m² out of a total surface area of 40,000 m²)*
- *Herch Beirut (30,000 m²) of the total surface area of 330,000 m²*
- *Bourj Abi Haidar (7,000 m²)*
- *Fih (20,000 m²)*

02. MOBILE NETWORK, INTERNET AND VOICE

In 1994, the Lebanese government granted 2 mobile phone licenses to 2 private sector operators in the form of BOT contracts. In 2002, the State recovered the 2 operations through 2 companies, MIC1 and MIC2, which are now 100% State-owned, by virtue of fiduciary contracts and assigned the management to private operators. Yet, investments remained under the control of the State, which hampered their growth, thus causing the progressive deterioration of the network. Ministers Bassil, Nahas and Sehnaoui initiated an aggressive investment policy in order to expand and modernize the network, and increase its capacity.

In January 2012, the management contracts were renegotiated prior to their renewal. A two-fold remuneration was imposed on the operators consisting of a fixed component and of a variable one based on the execution of the 12 objectives set by the Ministry.

These objectives aim at:
- Improving the call centers system
- Allowing at least one MISP (Mobile Internet Service Provider) to operate on the network
- Allowing distributors to activate new mobile lines online
- Improving the quality of service (QoS)
- Establishing National Roaming
- Replacing the current WLL by the WLL via the mobile network in areas designated by the Ministry of Telecommunications
- Creating an innovation department
- Creating mobile applications platforms
- Installing a remote network monitoring tool
- Offering up to 6 voice and data bundles
- Meeting the operating expenses (OPEX) targets
- Touch rebranding
- Installing a new ERP system at Alfa

MTC Touch Becomes Touch

Mobile phone operator MTC Touch changed its brand identity early July 2012 and became known as Touch. In fact, the MTC brand belongs to Kuwaiti operator Zain, which is in charge of MIC2 network, whereas Touch belongs to the Lebanese State. In other words, if the Lebanese State does not renew the contract with Zain, the Ministry of Telecommunications will have to change the brand immediately, or risk sustaining claims for damages.

Aware of this problem, Minister Sehnaoui incorporated the change of MIC2's identity among the operator's objectives in the renewed management contract with Zain. A media campaign designed by JWT, the bid winner, went along with the change of brand identity. It revolved around the theme "In my new world", where users expressed their wishes for a new world in a video posted online. JWT then selected some videos in order to create its outdoor, radio and TV campaign.

TELECOMMUNICATIONS MINISTRY ONE YEAR PROGRESS REPORT

Ministère des Télécoms وزارة الاتصالات

INTERNET SPEED

MOBILE INTERNET SPEED **INCREASED BY 18 TIMES**
Average user experience up from 70 Kbps (EDGE) to 1.2 Mbps (3G)

FIXED INTERNET SPEED (DSL) **INCREASED BY 15 TIMES**
Average user experience up from 40 Kbps to 600 Kbps

SUBMARINE CABLE CAPACITY **INCREASED BY 11 TIMES**
Total Lebanese capacity up from 3 Gbps to 33 Gbps (used 13 Gbps, available 20 Gbps)

PRICES TO INDIVIDUALS

FIXED INTERNET PRICES **DECREASED BY 80%**
DSL price down from 77$ to 16$ (1 Mbps). Additional 20% discount for Education

MOBILE PRICES **DECREASED BY 72%** IN THE U-CHAT BUNDLE
Alfa youth bundle starting price 9$ including: 30min local calls, 200 SMS, 50MB and unlimited calls to one Alfa number during weekends. Touch youth bundle to be launched soon

MOBILE PRICES **DECREASED BY 40%**
Touch local calls decreased by 40% daily from 10 p.m. to 8 a.m. and all day Sunday, for prepaid and postpaid
Alfa local calls decreased by 20% daily from 10 p.m. to 12 a.m. and by 40% from 12 a.m. to 8 a.m. for prepaid only

BLACKBERRY PRICES **DECREASED BY 88%** PER MB
Main plan down from 40$ to 24$, and up from 100MB to 500MB. New plans starting 8$ targeting youth

PRICES TO COMPANIES

INTERNATIONAL E1 PRICES TO COMPANIES **DECREASED BY 84%**
E1 (2 Mbps) down from 2,700$ to 420$

INTERNATIONAL LEASED LINE PRICES TO COMPANIES **DECREASED BY 82%**
International leased line down from 15,000$ to 2,700$

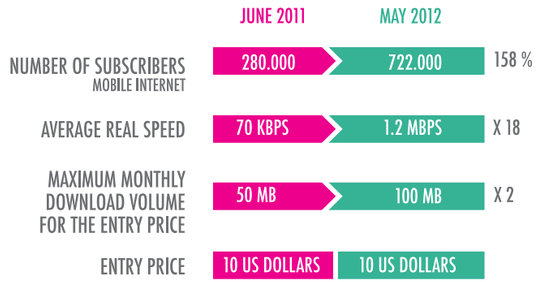
FREE INTERNET

FREE INTERNET **AT NIGHT** AND **IN PUBLIC GARDENS**
From 12 a.m. to 7 a.m.
3 achieved: Sioufi, Sanayeh and Tripoli
8 on the way: Jezzine, Zahlé, St. Nicolas, Jesuites, Tallet El khayyat, Saida, Horsh Beirut, Bourj Abou Haidar

02. MOBILE NETWORK, INTERNET AND VOICE

Internet: Adoption of the 3G+ in October 2011

In October 2011, Minister Sehnaoui launched the third generation (3G) mobile phone services. In July 2012, Touch network already consisted of 5,612 antennas and 15 mobile stations, while Alfa's had 4,505 antennas and 15 mobile stations. The networks are equipped with the HSPA+ technology which allows theoretical connection speeds up to 42 Gbps. Owing to the last technological advances, these speeds could reach 84 Gbps, a figure close to that of 4G speeds, which start theoretically around 100 Gbps.



OCT 2011: ADOPTION OF THE 3G

In 11 months, the number of users increased by 158%

Moreover, the new network is 4G-ready. When the decision is taken to move to 4G, it will be sufficient to modify the cards of the existing antennas. The Lebanese were greatly enthusiastic about 3G; in 11 months, the number of users increased by 158% to reach more than 722,000 subscribers in May 2012.

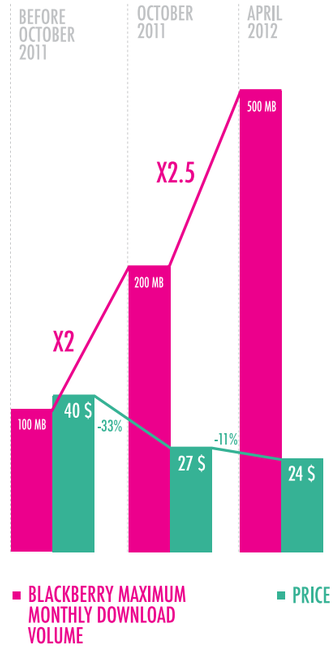
Sending Official Exams Results by SMS

Early August 2012, the Ministry of Telecommunications, in partnership with the Ministry of Education and mobile phone operator Alfa, allowed the 19,000 Brevet (9th Grade) and Lebanese Baccalaureate students to obtain the results of the exams by SMS, free of any additional charge other than the usual cost of the SMS. The service was available to both Alfa and Touch users. This initiative, which illustrates a successful collaboration among Ministries, helped to compensate for the delay in the correction of the exams suffered by students when the teachers went on strike to claim a salary increase.

Introducing "Machine to Machine" Chips

Early 2012, the Ministry introduced 3G «machine to machine» chips which allow devices to communicate without human intervention by using the 3G cellular network. Private sector applications for this kind of chips are numerous: following a fleet of trucks or cars, establishing a call for help system in case of lift breakdown, transferring the electricity or gas meters, etc. This system was available on the GPRS, but it was costly. With the advent of 3G, the Ministry decreased prices to allow for this kind of service to blossom.

Blackberry Offers



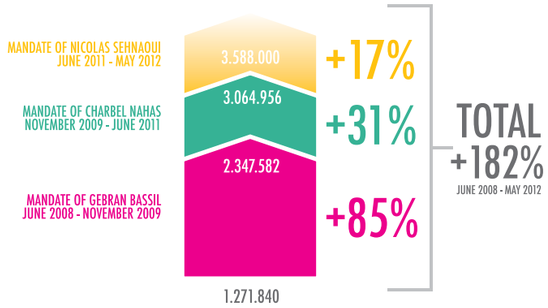
PRICE/MB
-88%

02. MOBILE NETWORK, INTERNET AND VOICE

Voice: Significant Increase of the Mobile Phone Penetration Rate

With the improvement of mobile phone networks and the decrease in prices decided during the mandate of Gebran Bassil in March 2009, the number of mobile phone subscribers, which had hit a ceiling of 1 million approximately, witnessed a significant increase: today, nearly 3.6 million Lebanese - i.e. 85.4% of the population* - have a mobile phone in use, which places Lebanon above the developing countries average of 78.8%.

** This rate is based on the resident population, including Lebanese nationals and foreigners, estimated at 4.2 million persons.*



THE AVERAGE REVENUE PER USER (ARPU), I.E. THE MONTHLY CONSUMPTION, DECREASED FROM 71 US DOLLARS (BEFORE MARCH 2009) TO 38 US DOLLARS (IN 2012)

85.4% of the Lebanese population has a mobile phone in use

Some problems remain as regards the quality of the service: the rate of failed calls is very high and subscribers often have to make several attempts before being able to reach the person they want to speak to. These problems should be solved by the end of the year thanks to a quality of service plan (QoS) which includes, inter alia, the progressive installation of 1,200 additional antennas, the increase of capacities on the access and on the heart of the network, the launching of a continuous optimization plan, the installation of an NOC allowing a real-time monitoring of the quality of the service on the entire network, as well as several other measures which would be too long to list.

The measurement procedure of quality criteria, known as Key Performance Indicators (KPI), was modified with the last renewal of contracts. In the past, companies used to measure themselves the quality of communications on their networks. Today, the Ministry of Telecommunications appoints an independent company specializing in the measurement of communications in order to measure the KPIs every month.

Lebanese pay an indirect 65% tax on their mobile communications

Overpricing the Minute

The prices of the minute on the mobile network are among the highest in the world. This is mainly due to the monopolistic structure of the market - a private monopoly at the time of BOTs and a public monopoly currently - and to a rocketing debt deriving from the rent economy and from a patronage-based redistribution of the State funds. The World Bank estimated this indirect tax at 65%, which places it on top of the world mobile communications taxation rates. Rejecting this indirect tax imposed on the Lebanese, Minister Bassil reduced the prices by 40%, followed by Minister Nahas with a 35% decrease (Start, Smart, Super and Waffer products) and by Minister Sehnaoui with a 72% decrease (U-Chat bundle and decrease of the cost up to 40% on Sundays and at night).

An Ongoing Effort to Democratize Access to the Service

- *Proposed decrease of the invoicing unit from 60 to 45 then to 30 seconds.*
- *Alfa introduced youth products in May at 9 US Dollars for the voice, SMS and data, representing a 72% reduction on the unit value. In 3 months, 136,000 users embraced the service.*
- *Touch decreased prices by 40% on all calls made between 10:00 p.m. and 8:00 a.m. and on Sundays for prepaid and postpaid cards, while Alfa decreased prices by 20% on calls made between 10:00 p.m. and midnight, and by 40% on calls made between midnight and 8:00 a.m. for prepaid cards only.*
- *Setting up the National Roaming.*
- *The distribution of MIC1 and MIC2 cards was restructured through the adoption of transparent and measurable criteria for choosing distributors: number of cars, staff, shops, etc.*

03. PUBLIC FINANCES, INVESTMENTS AND INCOME

In June 2011, the United Nations declared that access to the Internet was a fundamental human right. Meanwhile, developed countries realized that business logic did not justify making this service available to all their citizens given the low return on investment rates in areas with low population density or purchasing power. Therefore, since the beginning of the millennium, the international trend has been towards a return to public investments in telecommunications networks. The countries that adopted this approach have been able to reap the indirect benefits of the democratization of connectivity on economic growth and on job creation. As a matter of fact, the World Bank considers that a 10% increase in the penetration rate on the fixed broadband induces an additional 1.38% increase in the GDP, while a 10% increase in the penetration rate on the mobile broadband induces an additional 1% increase in the GDP. Another study conducted by the European Union shows that 25% of the new jobs in France during the last 5 years were created in the digital economy.

In Lebanon, with net revenues of more than 1.4 billion US Dollars, telecommunications are the second income-generating sector for the State Treasury after the VAT. This income is inflated artificially as a result of the uncompetitive practices of the sector's main actor, i.e. the State, which holds a double monopoly over the fixed and the mobile phone networks. In order to reduce the burden of this indirect revenue, Ministers Bassil, Nahas and Sehnaoui have taken a series of measures, such as: decreasing the price of mobile communications by 40% and of fixed communications by 57% (Minister Bassil), decreasing the price of the fixed Internet subscription by 80% (Minister Sehnaoui) and creating target products intended for low purchasing power categories, such as the youth, which reduced the cost of mobile phone services by 72% (Minister Sehnaoui).

Minister Sehnaoui recently sent a proposal to the Council of Ministers with the aim of decreasing the invoicing unit successively from 60 to 45 then to 30 seconds in 2013, which would induce, according to simulations, a 25% reduction in the average invoice.

Finally, this indirect taxation will greatly diminish when the Council of Ministers adopts the strategy proposed by the Ministry of Telecommunications. Indeed, the sector's division into horizontal layers will allow fair competition among the different actors in the different layers, which will inevitably lead to greater economic efficiency and to a decrease in prices.

Telecommunications are the second income-generator sector for the State Treasury after the VAT

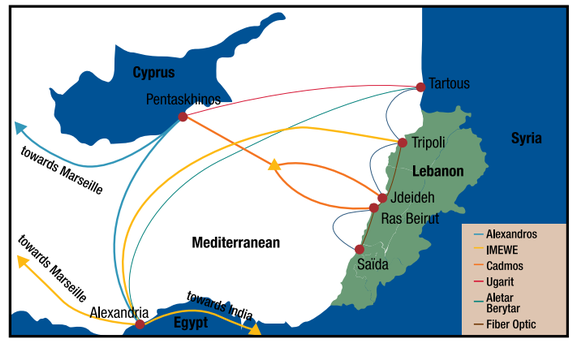
An Aggressive Investment Policy

The International Capacity of Lebanon

Ministers Bassil, Nahas and Sehnaoui made several investments in order to increase the international and local capacity and thus improve the country's connectivity. Lebanon's international capacity was equal to 2 Gbps when Minister Bassil took office. Under his mandate, the State invested 51 million US Dollars in the IMEWE (India - Middle East - Western Europe) consortium for the construction of a cable linking India to Europe through Lebanon and allowing, in time, a capacity of 120 Gbps.

Ministers Nahas and Sehnaoui made the necessary investments in order to upgrade this cable, which will eventually provide a capacity of 200 Gbps. On the other hand, the Ministry is currently discussing the purchase of a capacity likely to reach, depending on the need, 800 Gbps through the Cypriot submarine cable Alexandros, thus ensuring redundancy for the international traffic starting from Lebanon.

International Connection of Lebanon



In parallel, Lebanon started negotiations with Cyprus for the construction of a new cable named Europa, which would replace the aging Cadmos. Lebanon's contribution to the construction of the cable will be less than 10 million US Dollars to which we add the cost of the equipment.

3-day Internet Cut in Lebanon

In early July 2012, Internet connectivity was down for 3 days in Lebanon due to a cut in the IMEWE (India - Middle East - Western Europe) cable, which connects the country to the rest of the world. The break, which occurred 50 km away from Alexandria's shores at an 800-meter depth, was a hard blow to the country. Indeed, out of the 23 Gbps international capacity available to Lebanon, 20 are provided by IMEWE and 3 by Cadmos. The Minister had anticipated this problem as he obtained a mandate from the Council of Ministers on March 28, 2012, entitling him to conduct negotiations with Cyprus in order to provide the needed redundancy through the Alexandros cable. Teams from the Ministry paid several visits to Cyprus and worked out an adequate solution for Lebanon to become the owner of a portion of the capacity on the Cypriot cable Alexandros.

In late June, negotiations had reached an advanced stage and the conclusion of the agreement only needed the final touches on the contracts, the approval of the Court of Accounts and the agreement of the Council of Ministers. Minister Sehnaoui and his team traveled urgently to Cyprus in order to negotiate an agreement that would help restore connectivity to Lebanon. Feeling the strain

of the crisis and in a gesture to help Lebanon out, Cyprus agreed to provide Lebanon with 6 to 7 Gbps of connectivity free of charge from its excess capacity kept as a reserve in case Cyprus experiences an outage. Thanks to the unremitting and commendable effort exerted by a team of Ogero engineers in close collaboration with the Ministry of Telecommunications, connectivity was restored in less than 48 hours. A few days later, another agreement was negotiated away from the strain of the breakdown. The Ministry of Telecommunications obtained a free of charge 3-month trial of 10 Gbps on Alexandros from Cyprus to Marseilles. In parallel, the Ministry of Telecommunications activated a connection offer in Marseilles from Indian operator Tata Communications, with a 2-month free of charge trial, thereby providing Lebanon with Internet connectivity to the rest of the world. The IMEWE cable was repaired at the end of July.

03. PUBLIC FINANCES, INVESTMENTS AND INCOME

Lebanon's Local Connectivity

On the national level, the old fixed telecommunications network is no longer able to meet the growing demand on data traffic. Indeed, the old fiber network has become obsolete and it only covers 40% of the Lebanese territory. During his mandate, Minister Nahas had launched the execution of 4,700 km fiber optic network at a cost of 46 million US Dollars, which would be deployed by the end of 2012.

As for the mobile Internet, it remained very limited for a long time and the connection speeds it offered barely allowed for reading emails. Ministers Nahas and Sehnaoui made the necessary investments in order to deploy two 3G networks covering the entire Lebanese territory. The end of 2012 will see approximately 11,400 antennas and 30 mobile stations deployed, allowing for a 93% coverage of the territory. The remaining 7% is uninhabited and will not be covered.

In 2011, the telecom sector generated 1.4 billion US Dollars of net returns to the State

Ships' anchors and trawl gears sometimes cause cuts to fiber optic submarine cables. Minister Sehnaoui on board the Raymondcruze attending the repair of Beritar cable in December 2011.

A Significant Increase in Income

The annual income provided by the telecommunications sector increased from 921 million US Dollars in 2007 to 2 billion US Dollars in 2011, due to the increased penetration of the mobile phone and of the fixed as well as mobile Internet. Bids on mobile phone numbers also generated additional income to the Lebanese State, i.e. approximately 5 million US Dollars in 2009 and 1.8 million US Dollars in 2011. In another symbolic gesture aimed at cutting down on expenses, Minister Sehnaoui issued a rule limiting the monthly invoice of civil servants from all administrations to 300 US Dollars.

Municipalities' Funds: A Thriller

Between 1994 and 2009, the successive Ministers of Telecommunications levied a 10% tax on mobile telecommunications. Since the law did not specify the method of allocation of funds to the various municipalities, the withheld amounts were transferred to the Ministry of Finance. However, the law stipulates that these funds belong to the municipalities and that the Ministry of Telecommunications should transfer them directly to the individual account of each municipality with the Central Bank. Not only transfers were made to the benefit of the Ministry of Finance, but the latter also failed to post its debt to municipalities in its accounting entries.

In 2009, Minister Bassil sent several letters to Minister Chateh, asking him to recognize the debt, but to no avail. It is only towards the end of 2009, i.e. before leaving the Ministry, that he recognized the debt in a letter.

In 2010, Minister Nahas decided, following Minister Hassan's refusal to include the debt in the accounts published by the Ministry, to reconstitute the accumulated amounts in order to transfer them to the municipalities by retaining the sector's surpluses which transit through the Ministry of Telecommunications.

Municipalities may, for instance, use the funds in order to rehabilitate the quarries that deface our mountains.

In 2012, Minister Sehnaoui sent to the Council of Ministers a project for amending and clarifying the law. He proposed the adoption of an allocation grid and the creation of a Local Development Agency. According to this proposal, the accumulated funds (1.2 billion US Dollars) and the annual flow (140 million US Dollars) would be distributed to municipalities, both directly (50%) based on the new allocation grid and via the LDA (50%).

The Local Development Agency will receive and study development projects proposed by one or several municipalities, such as reforestation, renewable energies, waste and wastewater treatment, as well as public transport. The share belonging to each municipality from the funds managed by the Agency will be saved for and can only be used by the concerned municipality.

The LDA will promote development projects such as reforestation, renewable energies, waste treatment, public transport, etc.

04. BOOSTING THE PRIVATE SECTOR

The Lebanese private sector has shown unparalleled resilience in the face of the numerous crises, which have shaken the country since the Independence. It is a source of wealth that the country must encourage and promote. The measures taken in order to upgrade the networks and provide the country with strong connectivity aim at enabling the private sector to thrive and at recovering Lebanon's position as a regional hub from which companies and private individuals export their services to the rest of the world. In addition to developing networks and connectivity, several measures were implemented in order to boost the private sector.

Simplification of the Procedure for Importing Equipment

Two permits are necessary for the import of technological equipment: a special import permit for the equipment technology and a pre-authorization every time a merchant imports the actual merchandise. The procedure for the first permit remained as is, while the duration of the pre-authorization procedure was reduced as of March 2012 from 21 to 3 days following the second import of the same type of products.

Class Licenses for ISPs

Transparent and clear procedures were established early 2012 in order to determine the companies eligible to become Internet Service Providers (ISP). Fifteen new actors have submitted applications and obtained the approval of the Ministry.

ISPs and DSPs' Access to Telephone Exchanges

The private sector is present in 70 exchanges, as compared to 35 a year ago, which allows it to cover 80% of the Lebanese population. On the other hand, the private sector is expected to have access to 100 exchanges in addition to the 300 exchanges scattered all over the Lebanese territory. This measure has been the object of an administrative battle since the mandates of Ministers Bassil and Nahas, as some members of the administration were blocking the process arbitrarily.

The private sector is present in 70 exchanges, as compared to 35 a year ago, which allows it to cover 80% of the Lebanese population

One of the objectives set for MIC1 and MIC2 is to improve their call centers in order to meet the needs of a larger number of customers.

Reviving Call Centers

In 2009, Minister Bassil established regulations organizing call centers, allowing local and international operations, and covering both incoming and outgoing Lebanese traffic. However, the distribution of the necessary E1s to develop call centers was hindered deliberately due to administrative hurdles. Today, only 5 call centers are operational and they employ 500 persons approximately.

Under the mandate of Minister Nicolas Sehnaoui, and with the aim of allowing the sector's companies to survive and flourish, contracts with call centers were modified, allowing the latter, inter alia, to handle the local and international outgoing traffic. The contracts also specify that, in case the Ministry does not provide call centers with the requested E1 within a certain period of time, the call centers may get their bandwidth from the private sector. Contracts were signed for 5 new call centers and the Ministry expects to have more than 20 of them by the end of 2013.

Finally, negotiations were launched with IDAL with the aim of encouraging investments in this sector through tax exemptions. It is worth noting that in the Philippines, call centers employ 650,000 persons and contribute up to 11 billion US Dollars to the GDP.

04. BOOSTING THE PRIVATE SECTOR

Decrease of the Price of International Leased Lines

The decree dated October 2011 specifies an 82% decrease in the price of international leased lines, i.e. from 15,000 to 2,700 US Dollars per month. With the purpose of supporting decentralization, companies located at more than 20 km from the exchange will benefit from an additional 33% price reduction.

Decrease of the Bandwidth Wholesale Price

The price of E1 - the 2 Mbps speed - allotted to ISPs and DSPs decreased from 2,700 US Dollars to 420 US Dollars per month.

Incentives for Educational Institutions

Educational institutions benefited since October 2011 from a 20% discount on the general public tariffs for DSL subscriptions.

Special Procedures for 350 Heavy Users

In the first phase of the fiber optic project, 350 heavy users will be granted access to the service. The decree for the establishment of the project is ready and will be submitted shortly to the Council of Ministers. The concerned users are varied: in addition to Ministries and public institutions, MIC1 and MIC2, there are also banks and financial institutions, large hospitals, hotels, Internet service providers, the media, engineering companies that are service exporters, as well as other heavy user institutions.

Like other heavy users, universities are connected to the fiber optic network since the beginning of 2013.

LibanPost, Manager of the Lebanese Post Service

After the end of the war, the Lebanese government initiated a large-scale reconstruction effort with the aim of rehabilitating and modernizing the country's institutions. Within this program, the necessity of having a post operator was recognized. Therefore, in October 1998, LibanPost, a private company, was requested to rehabilitate and operate the post sector in the country. LibanPost embarked on a rehabilitation program based on 3 axes: rebuilding the post infrastructure, diversifying the company's activities (financial and governmental services, online trade, retail sale, etc.) and creating a leading brand. Between June 2011 and July 2012, LibanPost put in place the following initiatives in order to better serve its clients:

Facilitating access to services and products

- 7 new kiosks were opened and 2 are underway in: ABC Achrafieh and Dbayeh, Beirut Souks, Banque du Liban, Spinneys Hazmieh, Le Charcutier Dekwaneh, Jbeil and soon in Jeita, and Le Mall Sin El Fil. These kiosks expand the list of those that are already present at Rafic Hariri International Airport, Beirut Mall, CITYMALL, TSC Jnah, Spinneys Dbayeh, Jnah, Saida and Tripoli.
- Home service: Thanks to «Home Service», LibanPost services can be delivered at the client's house or office, an ideal solution for active or low mobility persons.
- A fast line was created in large post offices in order to speed up the execution of simple services such as the payment of invoices or the purchase of stamps.
- A new system was set up for the management of waiting lines in large post offices in order to reduce the waiting time.
- Pages were implemented on social networks allowing instant interaction with the requests of clients. LibanPost won the prize of the Best Interactive Page on Facebook (Middle East services category).

Services that facilitate the daily life of customers

- Collection of Alfa bills, a service which follows the collection of Touch and of the Ministry of Telecommunications bills.
- MoneyGram services for the electronic transfer of funds.
- Automatic transfer of mails from the mailbox to the clients' addresses.
- SMS notification in case of new mails received in the mailbox.
- A «Car Alert» service notifying the client by SMS of the payability of the car tax ("mécanique"), of miscellaneous violation tickets and of the expiry of the car insurance.
- Trade and online purchase from the United States («EasyShop »).
- LibanPost fidelity card, allowing the identification of clients and of their addresses, and the establishment of janitorial services.

Philately

Ten new stamps were released during the related period and others are underway, including the Visit of Pope Benedict XVI, the One Hundredth anniversary of the eminent Lebanese poet and writer Saïd Akl and the Tribute to the prominent Lebanese journalist and politician Ghassan Tuéni. Special commemorative editions were issued and activities were organized in collaboration with schools in order to raise awareness among the Lebanese youth about the culture of correspondence and stamps.

The quality of service

- A new monitoring system was implemented.
- A complaints management system was set up based on a CRM platform.
- A Business Continuity Plan was elaborated, guaranteeing the continuity of critical operations and activities in case of a disaster.
- A partnership was concluded with the Italian post for the development of financial services.
- Operational processes were restructured in order to optimize and improve the level of service.
- The GPS (Global Positioning System) technology was introduced in order to identify delivery points.
- A short number (1577) was adopted for accessing customer service.
- The ISO 9001 certification was obtained for Operations and Management, thus crowning the efforts exerted by LibanPost for a better quality management.

Morever, the LibanPost brand was reviewed in order to better reflect the promise made by LibanPost to its customers, that of a reliable partner which makes daily life easier.

05. THE ADMINISTRATIVE MALFUNCTION

The Acute Shortage of Employees and Skills within the Ministry Puts the Country at Risk

The laws in force specify that any recruitment within the public administration must be subject to a prior exam as well as to the approval of the Council of Ministers, a procedure that is long and painstaking. The majority of Ministries have limited human resources.

This situation is particularly problematic at the Ministry of Telecommunications as 85% of the positions are vacant due to a restrictive implementation of Law 431 by the Council for Public Service in charge of the recruitment. For instance, the international accounts department is running with one person only instead of 17.

On the other hand, Decree 10183 of 1997 prohibits the appointment of contractual personnel in order to perform the duties that are usually discharged by civil servants. This deadlock leads to a hopeless situation, which further complicates the mission of the public service. There is however a glimmer of hope: in December 2011, and for the first time, the Ministry of Telecommunications was exceptionally authorized to recruit 10 engineers in order to assist the equipment and construction department.

85% of the positions within the Ministry of Telecommunications are vacant

The State Recovers Its Rights

Invoices and Signs

In 1975, the Council of Ministers approved the proposal of the Ministry of Telecommunications aimed at asking Ogero to manage its invoicing department. The Ministry also authorized the latter to use its premises free of charge.

Following the collapse of the rule of law, Ogero simply removed all references to the Ministry of Telecommunications from the invoices sent to subscribers and started sending invoices in the name of Ogero. It also affixed signs indicating Ogero Telecom on the door of the Ministry of Telecommunications premises.

Following the measures and legal proceedings initiated by Ministers Nahas and Sehnaoui and since April 2012, invoices are issued again in the name of the Ministry of Telecommunications. Directives were also given for changing the signs.

The Third Network and the Recovery of the Second Floor in Adlieh

In 2007, the Chinese government donated 3G mobile phone equipment to the Lebanese government, which intended to set up a third mobile network intended for Liban Télécom, to be incorporated under Law 431 of 2002. The equipment was handed over to Ogero on behalf of the Ministry and installed on the second floor of the Ministry's building in Adlieh. Tests were conducted.

On May 26, 2011, the Minister of Telecommunications, Charbel Nahas, tried to enter the premises in order to take control of the Chinese equipment and give it to the 2 other mobile network operators, who were installing 3G on their network. A squad from the Interior Security Forces prevented him from going in, manu militari, despite instructions to the contrary issued by the Minister of the Interior, Ziad Baroud, who ended up resigning from his post as a sign of protest. A few months later, on September 23, 2011, Minister Sehnaoui entered the premises, changed the locks and recovered the assets of the Ministry, floor and equipment.

The investigation committee set up by the Ministry of Telecommunications completed its report on December 12, 2011. It highlighted the fact that the third network was used by non-registered phone numbers, that one of the main gateways allowing access to the network memory was found to be defective, that the Directorate General of Investment at the Ministry of Telecommunications refused to collaborate and provide the requested information, and that all of the network data after June 2010 were erased. Minister Sehnaoui submitted the report containing the findings of the investigation to the President of the Republic, to the Prime Minister, to the Speaker of Parliament and to the Public Prosecutor.

Minister Sehnaoui entering the second floor of Adlieh building.

05. THE ADMINISTRATIVE MALFUNCTION

All Data Beyond the Media Fuss: Facts and Figures

On January 14, 2012, the Minister of the Interior and the Minister of Telecommunications were requested to attend a meeting of the Telecommunications Parliamentary Commission in the presence of MPs representing the entire political spectrum. MPs insisted that the granting of the data be subject to control, awaiting the activation of the legal interception center. They also asked that the data no longer be granted systematically throughout the Lebanese territory and for all the Lebanese, for the sake of protecting individual privacy. The Minister of the Interior and the Minister of Telecommunications undertook to no longer ask and give the All Data, and to target the requests on regions or private individuals.

Between the 15th and the 28th, several security and political figures received threats. The 2 concerned Ministers decided in agreement to submit the matter to the Council of Ministers.

On February 1, 2012, the Council of Ministers decided formally that the All Data can only be delivered by the Ministry of Telecommunications following the approval of the Judicial Commission which is specified in Law No. 140 and composed of the 3 highest-ranking judges in Lebanon, i.e. the first judge of the Supreme Court, the President of the State Council and the President of the Court of Accounts. Between February and June 2012, the Ministry executed 1,763 targeted requests.

On June 6, 2012, the Judicial Commission, following a meeting with security bodies representatives, sent a blanket policy to the Ministry of Telecommunications whereby it decided to grant the All Data retroactively for the 3.6 million subscribers all over the territory, including the movement of calls and SMS, as well as the location and serial number of mobile phones or IMEI. It only excluded the IMSI or the secret code of phone chips, a code that is necessary for the interception of the content of phone conversations and messages.

Concerning the IMSI, the blanket policy specifies that it may be requested for a given region or for specific numbers. Upon receiving the new instructions of the Commission, the Ministry of Telecommunications complied immediately.

In July 2012, the President of the Republic and the Prime Minister organized separate and joint meetings at the end of which it was decided that the Judicial Commission would give its approval to the Ministry of Telecommunications in order for the latter to give the IMSI of all the Lebanese retroactively over 5 months and every day until September 12. This would, however, occur in the form of 2 separate requests, representing each 50% of the Lebanese territory. Upon receiving the new instructions of the commission, the Ministry of Telecommunications complied immediately.

Despite the foregoing, the Ministry of Telecommunications has been, since February 1, the target of repeated attacks from MPs and opposition figures, although the Ministry cannot give the All Data without breaching the Constitution, the law and the Council of Ministers' decision. This shows that the truth and the law are not a priority for some people in this country.

TELECOMMUNICATIONS MINISTRY ONE YEAR PROGRESS REPORT

Ministère des Télécoms
وزارة الاتصالات

MOBILE BROADBAND SUBSCRIBERS

IN 11 MONTHS, SUBSCRIBERS BASE **INCREASED BY 158%**

Lebanon penetration rate up from 6.7% to 17.2%, in 11 months. Arab States: 13.3% and World average: 17%
(Total data subscribers base up from 280,000 to 722,000)

FIXED BROADBAND SUBSCRIBERS

IN 11 MONTHS, SUBSCRIBERS BASE **INCREASED BY 20%**

Residential household penetration rate up from 20% to 24% in 11 months
(Total DSL subscribers base up from 200,000 to 240,000)

IMPACT ON GDP GROWTH

A **10% INCREASE** IN THE PENETRATION RATE OF MOBILE BROADBAND LEADS TO A **1% INCREASE** IN GDP

According to the World Bank

A **10% INCREASE** IN THE PENETRATION RATE OF FIXED BROADBAND LEADS TO A **1.38% INCREASE** IN GDP

According to the World Bank

IMPACT ON JOBS CREATION

IN EUROPE, OVER THE LAST 5 YEARS, **25%** OF THE NEW JOBS HAVE BEEN CREATED WITHIN THE DIGITAL ECONOMY

According to the World Bank

Projects Completed: *Equipment Import Procedure Shortening, ISP Class License Mode, 3G Launching, Special Numbers Auction Relaunch, DSL Tariff Decree, Contact Centers New Scheme, Private Sector Access to COs (DSL), Mobile Companies Management Objectives, M2M Price Decrease, Free DSL by Night Decree, Blackberry Tariff Decrease, Corporate Lines Tariff Decrease, Wholesale Prices Decrease, Mobile Youth Plans, IMEWE Used Capacity Increase, Free WiFi in Public Gardens.*

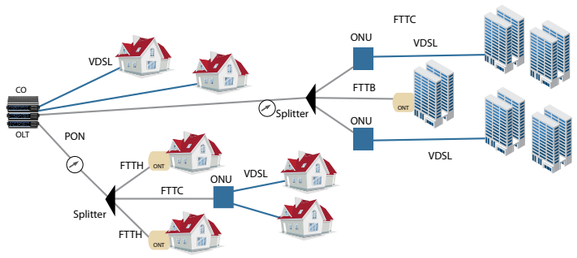
Projects Underway: *Fiber Optic Back Bone, DWDM, Europa and Alexandros Submarine Cable through Cyprus, Fibre to the Home, Fiber to Heavy Users, IPLC, Digital City, Active Cabinet and VDSL, IN, MPLS, NGN, Frequency Repharming, Right of Way, Right of Use, Hacathons and Center of Excellence with the World Bank, VOIP, Triple Play, Mobile Unit of Tariff Revision from 1 minute to 45 seconds and then to 30 seconds, National Tablet for Youth, National Internet Safety, Owner Supervisory Board Reorganization, Kalam and Telecarte New Distribution Scheme, Media Digital Transition (TNT), 7,000 New Telephone Boxes Tender, Distribution of Accumulated Municipalities Funds, Local Development Agency Creation. Mobile Virtual ISP's, National Roaming, R&D Departments, WLL Fixed Mobile Solution, Network Optimization and Coverage Extension, Touch Rebranding, Customer Care Centers Expansion, SIM Online Activation for Distributors, Mobile Application Platforms, 4G/LTE Trial Zones.*

06. ONGOING PROJECTS

Fixed Internet

a) With the aim of offering more services on the 4,700 km fiber optic network that is being deployed, MPLS - MultiProtocol Label Switching - equipment will be installed. The call for tenders was launched in July and the equipment will be installed by the end of 2012.

b) When the first fiber optic deployment phase is over, 2 projects will be examined: in the short term, i.e. 18 months, thousands of Active Cabinets will be installed bringing the fiber optic closer to inhabited areas, provided the last mile is covered using copper. This solution will allow the majority of subscribers to reach a connection speed of 4 Mbps and more at home. Then, the deployment of the VDSL and VDSL 2 technology, a new standard of DSL, will allow subscribers located at a maximum distance of 1,200 m from the exchange or from the nearest Active Cabinet, to benefit from connection speeds exceeding 24 Mbps and likely to reach 100 Mbps thanks to VDSL 2. The project aimed at bringing the Fiber To The Home (FTTH) will enable the majority of Lebanese to access a new range of services in 3 to 4 years, including the Triple Play (Internet connection, fixed line and IP-TV).



4,700 km of fiber optic are being deployed

The Minister follows an Ogero employee into a manhole leading to the underground cables. The Minister notices that the working conditions are unhealthy and commissions a physician to draw up a report with recommendations. Unfortunately, the recommendations went unheeded.

Fixed Voice

a) Kalam and Télécarte phone cards, which allow calls from public phone booths, have been missing from the market for more than a year. This is due to the refusal of Ogero management to execute the Minister's instructions and the procedure imposed by the Court of Accounts. In order to unblock the situation, the Council of Ministers decided, based on a proposal by Minister Sehnaoui, to resort to private distributors. Agreements were negotiated with 4 distributors for the sale of these cards. Yet, the Court of Accounts must approve the draft contract. The annual loss of income generated by the 4,000 public phone booths is estimated at 50 million US Dollars.

b) Calls for tender are underway at the Ministry in order to launch the installation of 7,600 additional fixed phone boxes, 600 of which were already allocated. The installation cost is assessed at 46 million US Dollars.

c) Approximately 25,000 households cannot have access to normal fixed phone lines and use the radio phones that were installed during the years 1998-2000 and which do not allow them to have an Internet subscription. A solution - fixed phone on a mobile network - was devised by the team at the Ministry of Telecommunications in order to address these problems. It is awaiting approval from the Council of Ministers.

d) A project for upgrading the fixed network is under study. The idea is to evolve towards a smart network, NGN or New Generation Network, which transforms all communications into IP mode, accelerates data transfers and expands the range of the proposed services. The first estimates call for a budget of 20 to 25 million US Dollars. The upgrading of the network will allow, for instance, the portability of phone numbers between the fixed and the mobile networks.

Public phone booths are deserted since April 2011 when Ogero management refused to print Kalam and Télécarte cards. The loss for the State Treasury is estimated at 90 billion Lebanese Pounds per year.

Mobile Network

a) Opening up the mobile Internet market to competition: In early June 2012, a procedure allowing a new category of Internet service providers, the Mobile ISPs, to operate was established. This procedure will enable these virtual providers to use the mobile network, which will introduce competition on this monopolistic market and promote a diversified offer.

b) Deployment of the LTE/4G technology: 90 sites equipped with the LTE/4G technology, which allows connection speeds above 100 Mbps, will be deployed soon in some trial areas in Lebanon, including, inter alia, the Digital District.

06. ONGOING PROJECTS

c) A mobile applications platform: Within the frame of the renewal of management contracts, the Ministry set a target for the 2 mobile operators consisting of launching 2 mobile applications platforms within the 6 upcoming months with over 80% Lebanese content. This would promote applications that are "Made in Lebanon" and encourage young creators and startups.

d) Ministry's support to university initiatives: The mobile applications contest at Balamand University was held under the patronage of the Ministry of Telecommunications. 29 projects presented by 62 students from 15 universities were submitted. 19 were accepted. The winners were designated and they appeared to have an international potential. The first prize was of 20,000 US Dollars and the second of 10,000 US Dollars. The 2 winning teams will benefit from a 6-month incubation period at Berytech.

e) Creation of a R&D Department: Industrial countries invest heavily in research and development. The average expenditures on R&D account for 2% of the GDP in the EU whereas this figure is close to zero in Lebanon. The Ministry of Telecommunications demanded that the mobile operators create R&D departments that would be in charge of technological innovation.

f) Reorganization of the OSB: The Owner Supervisory Board, i.e. the body overseeing the 2 mobile operators, is being reorganized in light of new market realities (3G, services to subscribers, etc.). This reorganization will optimize the quality of the service, competition and operators' creativity. It was also decided to provide all OSB members with health and life insurance, effective as of March 2012.

Putting the Waves Back in Order

a) Refarming and Right of Use: Currently, most companies which use frequencies do not pay a right of use fee, or they just pay a lump-sum fee, regardless of the band or of the nature of the frequency used. Some companies, particularly DSPs, use more bandwidth than needed. Therefore, the frequency spectrum must be reorganized in order to make room for new technologies such as LTE. This reallocation encompasses all actors: DSPs, TVs, Alfa and Touch, radios, etc. The project is now ready on the technical level, and negotiations are being conducted with the various actors in view of its deployment.

b) Digital Terrestrial TV or DTT: By joining the Geneva Convention in 2006, Lebanon undertook to launch the DTT by 2015. In April 2012, the Council of Ministers voted in favor of setting up a committee for handling the transition, and private TV channels were approached. While they agree on the principle, they condition their involvement in the project on the regulation of the cable market, which is still highly illegal. The TRA (Telecommunications Regulatory Authority) developed a project, which will be submitted to the Council of Ministers for approval. The Ministry of Telecommunications is planning on deploying the new networks by the end of 2014. A first pilot project using the transmission sites of public TV channel Télé-Liban will be launched by early 2013. Yet, the project must be submitted first to the Council of Ministers for approval.

The Minister during his visit to the satellite station of Jouret El Ballout on February 27, 2012.

Tablets Accessible to Youth

Tablets for school and university students: The Ministry of Telecommunications is seeking to democratize access to educational and entertainment content and allow greater access to the new information technology among the younger generation. To this end, it requested MIC1 and MIC2 to organize a call for tender for a testing period including 15,000 3G and WiFi enabled tablets with secure navigation. Supported by the Central Bank, the Association of Banks and the 2 mobile operators, the offer will include subsidized interest payments over a period of 24 months and a discounted 3G subscription tariff. 3 packages are proposed: 6-10 years, 11-14 years, 15-18 years.

The first batch of tablets will be distributed as of November 2012 based on the «first come first served» principle. The market potential is assessed at 500,000 tablets. The companies participating in the call for tender must invest in Lebanon and support the development of local content. Tablets in schools: The Ministry of Education project is more ambitious and its execution will take longer. It aims to replace books with tablets in the long run and to bring about a drastic change in teaching methods by taking advantage of the new technologies. The Ministry of Telecommunications insisted on realizing its project in close collaboration with the Ministry of Education in order to gain more synergy. As such, the first phase of the project will give the Ministry of Education the 1,500 tablets that are necessary for completing the pilot phase.

Security on the Internet

A project aimed at raising awareness among youth and parents regarding security on the Internet is under study. The purpose is to make them aware of the dangers they may face when they surf the web, such as pornography, harassment, invasion of privacy, and encourage them to adopt responsible behavior in order to bring to a minimum the number of cases of, among others, violence and abuse. The idea is to appoint one or several « ambassadors » per school who would be trained to answer the questions asked by the youth and educate them. A media campaign will also be launched. The full project will start in October 2012.

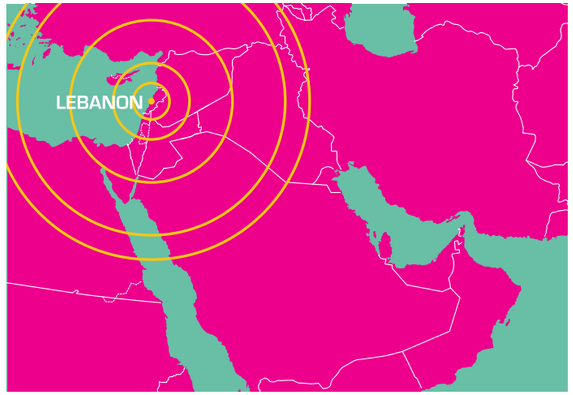
Dermandar: A Lebanese Success-story

A proof that Lebanon can play a leading role in digital technologies, Dermandar, an application which allows for the shooting of panoramic pictures with a mobile phone, is a typical example of a Lebanese success-story. Launched in January 2010 by 2 young Lebanese, Élie Grégoire Khoury and Élias Fadel Khoury, Dermandar has had more than 3 million downloads on the Apple Store. It is regularly a high ranking application in all the countries where it is sold, despite the fact that there are 36 similar competing applications. This success is all the more impressive that the application now costs 1.99 US Dollars per download. Berytech owns 35% of Dermandar, which is hosted by the incubator.

07. MAJOR FUTURE PROJECTS

Digital Zones

On April 25, 2012, the Council of Ministers approved the proposal of the Ministry of Telecommunications aimed at supporting and facilitating the creation of digital zones to be developed throughout the country. The concept is simple: a real estate developer joins forces with an incubator or accelerator in order to create a digital zone. They submit their project to the Ministry, which makes sure that it meets the eligibility criteria. Then, the Ministry will act as a facilitator and support the development of the zone by laying down leading-edge infrastructure and intervening with the other administrations such as IDAL, municipalities and the other Ministries.



Beirut Digital District is a pilot project, which was inaugurated on September 3, 2012. It started with 5,000 m^2 in 2012 and will eventually cover 40,000 m^2. The objective is to provide startups, as well as companies wishing to use Lebanon as a regional platform to export their services, with a zone where they can find all the professional offerings for the different services they need to develop their products. This is the cluster effect which is actively sought and which represents the main added value of digital zones throughout the globe. The physical proximity between companies and persons contributing to the production chain of a given product stimulate productivity and creativity.

Private sector actors that will be invited to join the cluster are:

- *Private companies*
- *Freelancers*
- *Educational institutions*
- *Venture capital funds*
- *Accelerators and other incubators*
- *Research and development centers and laboratories*

The cluster activities are:

- *Software development*
- *Web development*
- *Mobile development*
- *Games*
- *Hardware sales*
- *Telecoms sales*
- *Contact centers*
- *Data centers and network operation centers*

The cluster will also organize hackathons and host joint-creation platforms and centers of excellence.

Surface area of Beirut Digital District by the end of 2016: 40,000 m^2

His Excellency Prime Minister Nagib Mikati inaugurates Beirut Digital District with Minister Sehnaoui and representatives from ZRE and Berytech.

THE WORLD BANK

World Bank Mobile Center of Excellence

Lebanon enjoys important assets which may be used to develop a world-class mobile and web applications sector: a young and educated workforce, the highest ratio of engineers per capita in the world, a strong media position in the Arab world, design, entertainment (music, movies), an open and plural culture that fosters creativity, as well as a strong and free press.
The skilled labor faces high unemployment conditions and is denied access to a mature, free market. Therefore, the Ministry of Telecommunications launched, in collaboration with the World Bank, a project aimed at strengthening the technological ecosystem through the creation of a pole of excellence for mobile applications.

The Creation of this Pole is a 3-Staged Process

1) Organization of contests for entrepreneurs specializing in the creation of mobile applications (hackathons).

2) Launching of a joint-creation platform between universities and private companies: Projects will be tested according to a «Living Lab» model, which advocates the launching of pilot applications in test markets.

3) Creation of a connected center of excellence that will group the most renowned mobile applications' experts from Lebanon and the region. The project will be launched in the coming months and it requires loans of up to 4 million US Dollars approximately. It will need 3 years to be fully completed.

08. VISION FOR THE SECTOR

The Ministry has set the following objectives in order to develop a strategy for the sector:

1) Developing telecommunications networks with high-end technology.
2) Ensuring an abundant and redundant international connectivity.
3) Establishing rules for transparent and fair competition.
4) Preventing the formation of monopolies.
5) Making Lebanon an attractive place for regional and international companies.

In view of the small size of the country, the financial power of private groups and of States that keep a coveting eye on the sector, and the weakness of the rule of law, the proposed solution consists of structuring the sector in layers as opposed to the current silo structure where a limited number of vertically integrated actors are engaged in a fake competition. Indeed, experience shows that such a de-layered structure makes it harder for players at the infrastructure layer and players at the retail services layer to collude in order to control prices.

Therefore, private companies would engage in a stimulating competition at the service and retail layers; public companies open to some level of private ownership in the medium run would compete at the wholesale layer, and a public company, whose assets can be managed by a service provider from the private sector, would own the infrastructure. The maintenance and management of those assets will therefore be entrusted, in the form of managed services, to world-renowned contractors, who are already offering such services to a large number of countries around the world.

Far from being a Lebanese invention, this model has been implemented in Singapore and in Australia. Given the tremendous challenges associated with a good configuration, many countries like England are seeking to reform their local markets in this respect. This configuration will release the creative energy of private sector entrepreneurs without forcing them to raise colossal funds in order to become actors in the sector. This will allow startups and young fledgling entrepreneurs in local nurseries to fully blossom.

Owing to its cultural openness and outreach in the 5 continents, Lebanon may be able to outperform Israel by way of the digital economy and become the number one service exporter of the Middle East. In today's global economy, the added value lies in the services, not in the infrastructure, which is already subject to fierce battles waged by some world giants who are able to allocate huge budgets, including for research and development.

This strategy is still at the proposal stage. Consultations are conducted with private and public sector actors as well as with selected Lebanese expat executives who hold key positions in large international groups and who organized themselves under the Lebanese Telecom Taskforce or LTT. Several measures are awaiting approval by the Council of Ministers and the Parliament before becoming a roadmap engaging the Lebanese State.

Radio Amateurs

Following the victory of a Lebanese radio amateur in an international contest in Spain, a group of radio amateur friends organized an encounter in Kfardebiane - Faraya on March 24, 2012. Minister Sehnaoui was able to watch a call being made via an on-site radio station with a Spanish and a Croatian radio amateurs using the call sign OD5MOT. It is worth noting that radio amateurs around the world help maintain the continuity of local and international communications in cases of emergency or natural disasters.

ALL RIGHTS RESERVED
COPYRIGHTS 2012